REMARKS

Applicants have amended Claims 1, 2, 7, 14, 16, 18, 20, and 24 and canceled Claims 5, 6, and 10-13 and therefore, upon entry of this amendment, Claims 1-4, 7-9, and 14-24 are pending. Applicants respectfully request reconsideration and reexamination of the application.

Applicants, during a telephone conference with Examiner, elected with traverse Claims 1-9 and 14-24. Applicants have canceled Claims 10-13 (which Examiner indicates is directed to a second invention), but Applicants reserve the right, for example, to file a divisional application directed to the subject matter of Claims 10-13.

Claims 6 and 7 were objected to as being dependent upon a rejected base claim, but Examiner indicated that the claims would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Applicants have rewritten Claim 1 in independent form to include Claims 5 and 6, as suggested by Examiner.

Therefore, Applicants respectfully submit that Claim 1 is in proper form for allowance along with dependent Claims 2-4 and 7-9. Accordingly, the following remarks regarding distinctions over the prior art do not apply to the just-described claims.

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Claims 14-21 and 23 were rejected under 35 U.S.C. §

102(b) as being anticipated by U.S. Patent No. 5,654,540 to

Stanton et al. [herein referred to as "Stanton"].

Applicants have amended Claims 14 and 20 to clarify certain aspects of the present invention. For example, Stanton fails to teach or disclose, as suggested by Examiner, "determining a first phase difference between the first filtered output signal and the first frequency and a second phase difference between the second filtered output signal and the second frequency, wherein the first phase difference and the second phase difference provide relative position measurements of the grating, and a difference between the first and second phase differences provides an absolute position measurement" as recited in Claim 14 and "means for determining phase differences between the filtered electrical output signals and temporal frequencies of corresponding ones of the spatial frequencies, wherein a difference in the phase differences provides an absolute position measurement of the grating" as recited in Claim 20.

Therefore, Applicants respectfully submit that Claims 14 and 20 patentably distinguish over Stanton and that corresponding dependent Claims 15-19, 21, and 23 are also distinguishable for at least the same reasons. Therefore,

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Applicants respectfully request that the rejection under 35 U.S.C. § 102(b) of Claims 14-21 and 23 be withdrawn.

Claims 1-5, 8, and 9 were rejected under 35 U.S.C. § 103(a) as being obvious over U.S. Patent No. 4,710,026 to Magome et al [herein referred to as "Magome"] in view of Stanton.

As discussed above, Applicants have amended Claim 1 as suggested by Examiner. Therefore, Applicants respectfully submit that Claim 1 patentably distinguishes over Magome in view of Stanton and that corresponding dependent claims are also distinguishable for at least the same reasons.

Therefore, Applicants respectfully request that the rejection under 35 U.S.C. § 103(a) of Claims 1-5, 8, and 9 be withdrawn.

Claims 20, 22, and 24 were rejected under 35 U.S.C. §

103(a) as being obvious over U.S. Patent No. 5,489,986 to

Magome et al [herein referred to as "Magome '986"] in view of

Stanton.

Applicants have amended Claim 20, as discussed above, and submit that Stanton fails to teach or disclose certain aspects of the present invention and that Magome '986, alone or in combination with Stanton, fails to cure Stanton's deficiencies. Therefore, Applicants respectfully submit that Claim 20 patentably distinguishes over Magome '986 in view of

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Stanton and that corresponding dependent Claims 22 and 24 are also distinguishable for at least the same reasons.

Therefore, Applicants respectfully request that the rejection under 35 U.S.C. § 103(a) of Claims 20, 22, and 24 be withdrawn.

Accordingly, Applicants respectfully submit that Claims 1-4, 7-9, and 14-24 are in proper form for allowance.

Reconsideration and withdrawal of the rejections are respectfully requested and a timely Notice of Allowance is solicited.

If there are any questions regarding any aspect of the application, please call the undersigned at (949) 752-7040.

Certificate of Transmission

I hereby certify that this correspondence is being faceimile transmitted to the Commissioner for Patents, Fax No. 571-273-8300 on the date stated below.

The Carl

November 17, 2005

Respectfully submitted,

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